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# PROGRESS REPORT

ON

# FOREST ADMINISTRATION

IN THE

## JAMMU & KASHMIR STATE

FOR THE

*Fasli Year 1988—89, ending 31st Assuj 1989  
(6th October 1932).*

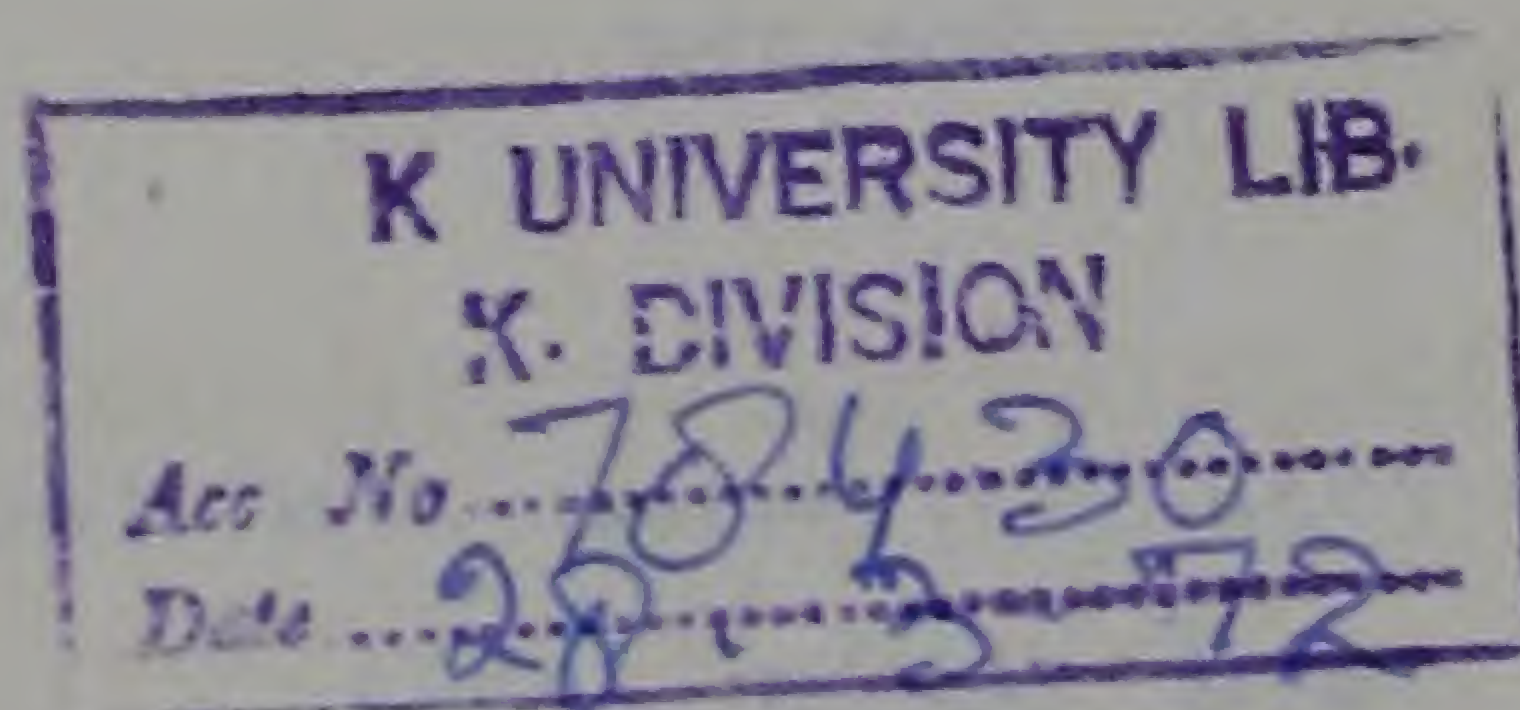


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## NOTICE.

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P. H. Clutterbuck.

Chief Conservator of Forests.













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Photo. by H. L. Wright.

The Forest Stall  
Jammu and Kashmir State Exhibition, 1989.



**PROGRESS REPORT**  
**ON**  
**FOREST ADMINISTRATION**  
**IN**  
**JAMMU AND KASHMIR**

**For the Fasli year 1988-89 ending 30th Assuj 1989,  
(16th October, 1932).**

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**CHAPTER 1. GENERAL.**

1. The climatic conditions cannot be said to have been very favourable during the year under report.

2. The year was remarkable for prolonged drought both in the beginning and the end. In the first quarter of the year there was no rain or snowfall what-so-ever. This permitted a good deal of work in connection with soil preparation and burning of debris etc. The winter was mild and the snowfall on the whole was not heavy, though at the higher altitudes there were tolerably heavy falls of snow. Spring rains in most of the divisions were scanty, and consequently the floatation of timber was greatly handicapped. Pir Panjal and Jhelum Valley Divisions report to have had good and timely rains with the result that their mahans were very successful. The summer was hot and dry particularly towards the end.

3. On account of its dryness the year experienced a good many incendiary fires in Udhampur, Riasi and Ramban Divisions. There was very little Deodar seed, and with uncertain rains, followed by a long spell of excessive drought sowings of Deodar and Kail yielded very poor results. Mortality in the transplants both in the nurseries and in the forest was very heavy. The annual crop of bamboo sprouts was very deficient in the Jasrota forests.



Although unfavourable in every respect for regeneration and other silvicultural work the abnormal heat produced a heavier outturn of resin from the Udhampur Division.

4. The universal slump had its repercussions on timber trade in Kashmir as in other parts of India. There was no demand for accumulated surplus stocks in sale depots. The traders had to withhold their over-production higher up at the launching ghats. Decline in the prices of staple food crops and cotton hardly left any margin for purchase of timber by the public. On account of very heavy shrinkage in its receipts the Railway had cut down its requirements to the rock bottom minimum. It reduced the price of B. G. sleepers from Rs. 6/8 to Rs. 4/12 and fixed the price of kail B. G. sleepers at Rs. 3/8 for the next 3 years. Rigours of passing of sleepers by the Railway become most oppressive. All these adversities hit the timber trade so badly that the majority of the forest lessees of Kashmir were reduced to the verge of bankruptcy. At this critical stage His Highness' Government came to the rescue of its contractors and saved them from collapse by granting a very handsome remission of more than  $22\frac{1}{2}$  lacs of rupees in the royalties, and also effected a reduction of  $23\frac{3}{4}$  lacs cft in the outturn of deodar and kail and chir. This action very soon reflected itself by reviving the timber market to a very appreciable extent. The 3 year's leases that had to be put to tender within a few months of the grant of remissions of royalties and reductions in outturn brought forth favourable offers that would not otherwise have been possible.

5. The first half of the year under report was the worst period in the history of the timber trade for a long time past. But conditions improved after that so that at its end, the year held out definitely favourable prospects for further improvement in trade conditions in the next year.

6. There was no scarcity of food stuffs in the Jammu Province and the crops during the year were good particularly in hilly districts.

7. In Kashmir the shali crop was damaged by 'Rye' throughout the valley and the crop outturn was very seriously affected. The floods in July 1931 caused further damage. Although these floods were not as severe as in the previous years they added to the cumulative effect of floods in previous



years in reducing the reserves of food grains held by individuals throughout the country. The maize, wheat and barley crop in 1988 was damaged considerably by floods in low lying areas and by adverse weather conditions.

8. Food grain prices were high during the year due to these causes and they were further affected by civil disturbances. The Food Control Department had to resort to importation of rice from the Punjab to check rising prices. The prices began to fall on the arrival of the imported rice. In the summer of 1989 shali, maize, wheat and barley crops were better than in 1988.

9. The Kishenganga Valley above Titwal was in the grips of a very severe famine during the year.

10 There was not much political disturbance in Kashmir but there were serious upheavals of agitation in the Mirpur district and Rajouri Tehsil of the Jammu province during the year.

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## CHAPTER II.

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11. The Forest Department remained under the Hon'ble Minister for Development upto 27th August 1932, during which period this office was held by Sir Zaffar Ali Khan, Khan Bahadur, Sheikh Abdul Qayoom and Mr. Wajahat Hussain one after another. Thereafter it was transferred to the portfolio of the Hon'ble Minister for Revenue and Agriculture.

12. Mr. H. L. Wright, I. F. S., remained in charge of the Department throughout the year under report.

13. The Circle charges were held as under:—

i. Working Plan Research and Education Circle by Pt. Shiv Nath Kaul, Conservator of Forests, upto 21st Katik, 1988, when it was abolished and amalgamated with the Direction Division under the Chief Conservator of Forests.

ii. Jammu Circle by late lamented Raizada Hukm Singh Bali upto the end of Katik 1988 when he was retired on pension after having been relieved by Pandit Shiv Nath Kaul, Conservator of Forests, who remained in charge of the Circle for the remaining period of the year.

iii. Kashmir Circle by Mr. T.C.Hoon throughout the year.

14. Four Deputy Conservators of Forests, namely, M. Jagan Nath, Pandit Sant Ram Dogra, Lala Amin Chand and Lala Daulat Ram retired on pension in consequence of the retrenchment effected from 1st Maghar, 1988, and their posts were retrenched from the same date and this reduced the strength of the superior service from 36 to 32.

Jammu Division was closed with effect from 1st Maghar, 1988, and 17 Forest Rangers were retrenched and retired on pension. In addition to this five clerks and two peons were also brought under reduction.

15. Five students who were sent to Dehra Dun Forest College for training in the Ranger's course returned at the close of the year after successfully completing their course of training. One of them Pandit Niranjana Nath obtained Higher Standard certificate with Honours while the remainder qualified for the Higher Standard. At the close of the year the number of Rangers was 91 against the sanctioned cadre of 107. A reduction of 16 posts was thus made during



the year and this was mainly due to retrenchment. The number of Dehra Dun trained Rangers is now 54.

16. Two clerks were transferred to the Accountant-General's office in connection with the Revenue Audit which was transferred to the Accountant-General's Office last year. This with the reduction of five posts mentioned above reduced the strength of the clerical establishment from 130 to 123.

The casualties during the year comprised three clerks and three Forest Guards all of whom died.

17. Riasi, Bhadarwah, Bhadarwah Working Plan, Kishtwar and Ramban Divisions were inspected by Conservator of Forests, Jammu, while Sindh and Keran Divisional offices were inspected by Conservator of Forests, Kashmir, during the year.

18. The Accountant-General's Local Audit Party inspected the following Divisional Offices:—

i. Kashmir Division.

ii. Kamraj Division.

No serious irregularity was brought to light.

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### CHAPTER III. CONSTITUTION OF STATE FORESTS

19. The total area administered by the Forest Department at the end of Assuj 1989 was 10119.32 sq. miles which was made up as follows:—

Alteration in area.

i	Demarcated forests ...	9951.25	square miles
ii	Partially demarcated	33.58	„
iii	Undemarcated forests	134.49	„

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Total 10,119.32 square miles

As compared with the previous years there is an increase of 14.97 sq. miles under Demarcated forests only which is due to rechecking of areas in Bhadarwah and Langet Divisions.

No demarcation work was done in either of Jammu and Kashmir Circle forests during the year under report.

20. There was no change in the length of demarcated boundaries during the year. The total length of boundaries remained at 33,624 miles. The expenditure under this head was Rs. 3,591 against Rs. 2,207 in the previous year.

21. Very little work was necessary during the year and only Rs. 72 were spent compared with Rs. 175 last year.

The total expenditure incurred on the constitution of State forests during the year was Rs. 3,680 against Rs. 822 last year.



## CHAPTER IV – WORKING PLANS.

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22. The management of the State forests now rests on a very sound basis. With the compilation of the Working Plans for the Bhadarwah Division the high level forests of the Reasi and Mirpur Divisions and the lower Chenab Chir forests which are under compilation, all the commercial forests of any importance will have been brought under working plans on modern lines. The forests of the Billawar Division are of minor importance economically and are being worked on a very conservative system of improvement fellings under the old plans. It is contemplated that these plans should also be revised so as to bring the working of these forests on to modern lines. Kuth Working Plans have also been prepared for all the major kuth bearing areas except the kuth fields of the Khuihama, Manasbal and Sindh Ranges of the Sindh Forest Division.

23. At the commencement of the year the Working Plans, Research and Education Circle comprised, the Research Division, the Utilization and Jammu and Bhadarwah Working Plan Divisions. In Katik 1988 with further retrenchment in the Forest Department the Circle was abolished. The Research Division was placed directly under the supervision of the Chief Conservator of Forests, and the remaining Divisions were put under the territorial Conservators. The control and administrative side of the work was placed under the Working Plans Branch of the Chief Conservator's Office and Lala Shadi Lal Vadehra, Deputy Conservator of Forests, was entrusted with this work.

24. All the Divisions mentioned above continued to function throughout the year. In Chet 1988 the revision of the Lolab Forest Working Plan was taken up by an Assistant Conservator of Forests attached to the Langet Division.

25. The following statement summarises the progress of the Working Plan work during the year:—

(i) Plans sanctioned.	...	Kashmir, Sindh, Tharochi-Rajmahal, Ningli, Keran Kuth and Langet Kuth.
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( ii ) Plans distributed,	...	Kashmir, Sindh, Tharochi-Rajmahal, Ningli, Jhelum Valley and Keran Kuth.
( iii ) Plans awaiting Government sanction.	...	Nil.
( iv ) Plans and maps printed.	...	Kashmir Plan and map. Sindh Plan and map. Jhelum Valley Plan and map. Ningli Plan and map. Keran Kuth Plan & General Forest map Kashmir State.
( v ) Plans and maps with the press.	...	Gurez Working Plan Langet Kuth Plan.
( vi ) Plans under preparation.	...	Bhadarwah Division, High Level Forests of Mirpur and Reasi Divisions, Lower. Chenab Chir Forests, Dudu Forests and Lolab Forests.
( vii ) Plans pending with Working Plans Branch.	...	Jhelum Valley Kuth.

26. Thus it will be seen that all the arrear work of printing and distribution of Working Plans and maps has been brought up-to-date during the year for which credit is due to the Working Plans Branch of the Chief Conservator of Forests' Office. In addition to this the arrear typing work of the compartment histories of the Working Plans in force was completed.

27. The work carried out by each party during the year is as follows:-

Jammu Working Plan Division-Pandit Shridhar Dhar, Deputy Conservator of Forests, remained in charge of the Division throughout the year. During the winter of 1988 the compilation of the report for the high level forests of the Mirpur and Reasi Divisions, and Lower Chenab chir forests was carried out. During the summer of 1989, the field work of the Dudu Working Plan was taken up.



Bhadarwah Working Plan Division-L. Faqir Chand Gupta, Assistant Conservator of Forests, continued to hold charge of the Division throughout the year. The compilation of the report of the Bhadarwah Working Plan was completed.

Langet Division-P. Ram Lal Khajuria Assistant Conservator of Forests, was attached to the Langet Division for the revision of the Lolab Plan. He completed the field work which consisted in the enumeration of the whole growing stock of Deodar and Kail during the summer of 1989.

M. S. W. Khan, Forest Ranger, prepared the Kuth Working Plan of the Langet Division.

28. The revision of the Gurez Kuth and Pir Panjal Working Plans will be taken up in S. 1990. The   
Future work. Basantgarh and Basohli Forests will be re-examined, and a Working Plan on modern lines will be prepared for the whole of the Billawar Division. The revision of the Kishtwar Kuth Working Plan which is due since S. 1987, will be taken up next year.

29. Most of the important working plans are due for revision in the next three years. The task will be heaviest in S. 1992, when nearly all the important Deodar forest working plans such as Langet, Kamraj, Keran, Muzaffarabad, Ramban and Kishtwar will have to be revised and it is likely that the re-opening of the Working Plans Circle may then be found necessary.

30. On account of the world wide depression in trade which so seriously effected the timber market,   
Control. the major fellings had to be restricted in all the forests. The outturn in the case of the current leases has been reduced by 25% of the prescribed yield for Deodar and 50% for Kail, while the felling of Fir has been left at the option of the purchasers. In the new leases for the Kishenganga and the Chenab forests, the outturn has also been very much reduced. Owing to the limited demand for Fir timber, restricted fellings are being carried out in the Fir Working Circle of the Pir Panjal and Kashmir Working Plans, while the work under other places which deal with Kail and Fir only is held in abeyance. It is hoped that under the lease with Mr. Sullivan who is going to work Fir for paper pulp most of the working plans for Fir forests



will come into operation.

31 For the same reason thinning operations had to be suspended all over the State forests except in those areas where they had been sold forward under a long lease. Owing to the depression in the bamboo market only a small portion of the outturn prescribed under the Jasrota Plan is being worked.

32 The position regarding Control Forms has improved considerably. Control Forms A,B and C have been brought up-to-date. The compartment histories are in arrear in certain Divisions as it is difficult to obtain the necessary data which were not been recorded at the time.

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Kuth Plants, Gurez.



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Photos. by S. S. Oswal.

Kuth growing under fir trees.







## CHAPTER V. SILVICULTURE.

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33. The protracted drought in the summer coupled with the lean seed year for Deodar produced conditions very unfavourable for natural regeneration and consequently there was hardly any addition to the existing stock. But as the spring rains were normal, the seedlings that followed the bumper seed year of 1987 did not suffer to any appreciable extent. The important features observed were that seed was usually borne by trees standing in the open and on hotter aspects and that the mother trees in some of the P. B. I. areas in the Lolab forests also produced moderate seed this year.

34. The regeneration of Blue Pine (Kail) was generally satisfactory. Kail produces moderate seed every year and provided the areas are properly protected from fire and grazing there is not much anxiety in restocking them naturally.

35. The Chir Pine regeneration received another set back this year in the Mirpur Division through incendiarism. The Fir regeneration was deficient as usual but the problem of regenerating Fir forests has not assumed importance since owing to the depression in the timber market most of the pure Fir forests are not being worked.

36. In the Jammu Circle, the reproduction of bamboos by culms was satisfactory but as the monsoon rains ceased suddenly many of the culms died from drought.

37. The main operations for aiding or inducing natural regeneration are collection and burning of felling debris, cutting back or eradication of useless species and fencing. These are more or less essential for forests which are under the intensive method of working. Progress is reported from all the divisions where work under the Uniform system is in force but special mention must be made of the Langet and Ramban Divisions where progress was most marked. From the experiments conducted in the Ramban Division it has been found that so far the best and the cheapest method of eradicating Pohu ( *Parrotia Jacquemontiana* ) is to burn it while standing by piling up felling refuse round its base. This appears to kill it com-



pletely. This method has the further advantage that Pohnu and debris can both be disposed of without incurring any additional expenditure.

38. Every year as more areas are felled under the regeneration fellings, an increasingly large area has to be gone over under these operations. Efforts are being made to obtain maximum results with minimum cost. The villagers are allowed and encouraged to remove freely as much of the felling debris as they can. But unless some money is put back into the forests on regeneration measures the neglect will unfailingly show itself in the condition of the forests twenty five or more years later, although the immediate result may not appear to be serious.

39. Weeding and cleanings were carried out in the Tending operations. Langet and Pir Panjal Divisions with very useful results. Cutting back of pohnu and inferior growth standing over or interfering with regeneration was carried out in a number of divisions in the Kashmir Circle.

40. The most important operations under this heading are thinnings which are prescribed in all the modern Working Plans to be carried out in areas other than P. B. I. on a ten years cycle. These operations have been suspended temporarily (except in divisions where thinnings have also been leased out along with Major coupes) until trade conditions improve sufficiently to enable the market to absorb the outturn.

41. As bumper seed years occur at long intervals, Artificial regeneration. artificial work such as sowing and transplanting has to be carried out so that regeneration may keep pace with the fellings. In spite of the fact that this was a lean seed year about eighty maunds of seed was sown in various divisions. Langet, Ramban and Pir Panjal Divisions are taking keen interest in artificial regeneration. Nothing can be better than the Deodar nurseries recently established in the Langet Division where seedlings for transplanting purpose are being raised. In the Pir Panjal Division transplanting of seedlings from the Yarwan forest to the regeneration areas is still being carried out and about 42,000 seedlings were transplanted but the mortality was very high. Transplanting of this kind has not proved a success in other Divisions and should be discontinued as soon as the nursery raised stock is available.



42. The afforestation of the Shankaracharya hill is being carried out under the supervision of the Pir Panjal Division. In this area where the soil has deteriorated very much on account of long exposure tender species like Deodar have not so far succeeded. Horsechestnut, Poplars, Robinia and Blue Pine are doing well. This work will require to be pursued with great care and perseverance to attain any degree of success.

43. About a million and a quarter willow cuttings were planted during the year in the Ningli and Haran plantations Sindh Division, and Mamandaji plantation Kashmir Division.

44. Considerable amount of work was done in the Kuth propagation Ramban Division. Besides four lacs of seedlings transplanted at Suithan about 50,000 pits were sown and 15,000 cuttings transplanted in different parts of the division. Small nurseries were also made in the Dachhan and Marwa ranges Kishtwar Division. Further extension of the nursery at Gosai, Sindh Division, was stopped on account of unsatisfactory work.

45. Digitalis cultivation was successfully extended in Digitalis several divisions. The Digitalis nursery at Chattarnar is reported to be fast disappearing on account of unskilful upkeep. The nursery at Tangmarg has been considerably extended and placed under the direct supervision of the Utilization Division. It is hoped that the output will be doubled from next year.

46. Experiment regarding the propagation of foreign medicinal plants such as Psyllium, Chamomile etc were carried out and have met with success to some extent. It is intended to grow all the ingredients of vegetable laxative pills in Kashmir. Nearly all the ingredients are indigenous to Kashmir with the exception of Iris florentina and Euonymus atropurpureous which are also being tried here.

47. Thakar Harnam Singh Pathania remained in Silvicultural research charge of the Research Division throughout the year. Tentative figures for growth and yield of willow have been worked out and are incorporated in the Ningli Plantation Working Plan. Fifteen new sample



plots of coniferous species were laid down in the Udhampur, Pir Panjal and Reasi Divisions. Diameter growth data for Chir was collected in the Udhampur Division.

48. Very few people realise the importance of this branch of Forestry which is in fact the basis of correct forest management as the calculation of rotation and yield depend entirely upon the data collected which is ultimately of great help both to the Forest Department and to the exploiter.

49. Silvicultural research in the State may now be said to have made a good start on sound lines, and for this the credit is entirely due to Thakar Harnam Singh Pathania who is one of the few officers who takes a keen interest on this side of the work. He has been on this work for the last four years and has collected considerable data for Deodar yield tables. The data have been sent to the Forest Research Institute Dehra Dun for co-ordination.

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## CHAPTER VI. PROTECTION.

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50. This question was dealt with at length in the previous year's report. The matter remained unchanged during the year.

Erosion and goat grazing.

51. The total number of cases reported during the year was 5,956 as compared with 5,528 during the previous year. The number of new cases taken into Court was 268 which added to 257 cases pending at the beginning of the year made a total of 525 cases as compared with 551 of the previous year. Of these the Court disposed of 266 cases leaving 259 cases pending at the close of the year. Of the 266 cases disposed of 182 resulted in convictions giving a percentage of 68 as compared with 49 during the previous year. The highest percentages of convictions were in Langet and Ramban=100, Kishtwar=84, and Muzaffarabad=81 while the lowest percentages are reported from Kamraj, and Jhelum where it was only 23 and 25 respectively.

Offences.

52. Three thousand seven hundred and ninety one cases involving 4,687 persons were compounded during the year as compared with 3,490 cases involving 5,705 persons in 1987-88. Rs. 22,428 were realized as compensation averaging Rs. 5/14/5 per case and Rs. 4/12/6 per person as compared with Rs. 7/2/1 per case and Rs. 4/5/9 per person during the previous year.

53. In Kashmir Circle there were 211 cases of fire burning an area of 4,886 acres, but in Jammu Circle 617 cases took place affecting 86,002 acres. The total expenditure under this head in both of the Circles is Rs. 927.

Protection from fire.

54. The bulk of the area that suffered in Jammu Province from the fires was in the Chir zone, i. e., in Udhampur, Reasi and Mirpur Divisions. The fires which were mostly incendiary started purposely by zamindars in the Mirpur District spread through Riasi and Udhampur side upto Bhadarwah. In spite of large areas through which the fires passed, the damage to the forest growth was less severe than might have been expected because most of the fires were



ground fires which destroyed small patches of regeneration here and there but did not develop into crown fires.

55. This year the following methods were introduced in putting out fires instead of using water and earth for the purpose:-

i. The fires were stopped from entering Deodar and Kail zones by making broad fire lines.

ii. Instead of extinguishing burning snags and logs these were collected in heaps and burnt to ashes in order to reduce the dry inflammable materials on the ground. Fortunately the Chir areas under Resin tapping in Udhampur Division were not affected at all in spite of the fact that the locality is so dry and hot. The explanation is that the resin work is a source of income to the villagers and they did not want these areas to burn.

56. At the close of the year under report out of 9,951.25 square miles of forests only 224.84 miles or 2.26 percent of the total area were closed to grazing. The increase of 94.86 miles on the previous year is due to the closure under rules of the worked out coupes.

57. In Keran Division the worked out coupes were closed to grazing and grass cutting as reported last year, but grass cutting was subsequently allowed under Chief Conservator of Forests' orders as the zamindars had no pastures near by.

58. The Conservator of Forests, Kashmir, reports that damage by Bakervals was rather heavy.

59. In Pir Panjal Division two cattle pounds continued to function and Rs. 132 was realized as cattle pound fee.

60. The Conservator further reports that great damage was done in this Division by monkeys so that no pine seed could be collected.

61. The Conservator of Forests, Jammu, remarks that a severe set back to protection of forests from cattle was received by the cancellation of the progressive scale of grazing



fees for goats since this will certainly result in a great increase in the number of goats.

62. The Haran Willow Plantation is not yet free from the attack of caterpillars though this year the attack was less than usual.

Protection from injuries  
from natural causes.

63. Much damage was done by avalanches.

64. In many places the damage by black bears is increasing and some special action regarding these animals is necessary.

65. In Lolab and Ramahal Ranges there is no disease except *Tremetes pini* that continues to do damage.

66. The parasite *Arceothobium* is spreading fast in Bhadarwah and Ramban Forests and some of the Forests in Ramban Division are suffering from other fungi such as *Tremetes pini* and *Fomes annosus*.

67. From a silvicultural point of view the Conservator of Forests, Jammu, is of opinion that the working of these areas ought to have been taken up before other areas were touched. However, he suggests that this point requires consideration at the time of the next revision of the Plan.

68. In Billawar Division lac is reported to have been suffering from parasites such as *Eubluma amabilis* and *Eubluma scitula*.

69. Jammu Circle. Special Military Guards having been discontinued Kuth protection was carried out by the staff with the help of Kuth establishment. Pickets at important stations and patrol parties worked well.

70. Two Kuth smugglers routes were explored. One from Gandhari Nallah to Andrun Nallah over the Hamur Pass about 16,000' was explored by the Conservator of Forests himself and the other from Machel to Kiar Nallah explored by Kuth Officers.

The result of this was that small stray parties of Kuth smugglers could not move above along these routes and they had to take recourse to a more complicated and



stronger organization resulting in an armed raid by a gang of about 200 organized smugglers. Though the staff of the Forest Department was not strong enough to arrest such a big gang, yet with timely action it succeeded in getting 15 Kuth smugglers arrested and 40 dry kuth bags confiscated through the Zanskar Military Force. In future a stronger force is required to fight such armed and organized raids.

71. Kashmir Circle. No extra establishment was lent or borrowed from other Divisions for kuth protection nor any Military detailed to Keran Division during the year. The issue of the Government Notification did a great deal of good as no serious Kuth smuggling was brought to notice throughout the year except the last 2 months of the year under report when a few cases were brought to notice and dealt with.

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Pure Juniper Crop Gurez.



Photos. by S. S. Oswal.  
 Cantilever Bridge at Baragagai, Gurez.  
 80ft. span constructed during 1988.







## CHAPTER VII- FOREST ENGINEERING.

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72. During the year under report nearly  $26\frac{1}{2}$  miles of new roads were constructed at a cost of Rs. 4,300 averaging Rs. 162 per mile as compared with 217 miles in the last year (1987-88) costing Rs. 33,045 and averaging Rs. 154 per mile. Besides Rs. 1,527 were paid as arrear payments for 2 bridges and roads in the Jammu Province. Rs. 5,087 were spent on the construction of 4 new bridges and Rs. 200 on 2 Jhulas in the Kashmir Province as compared with 23,574 during the last year. 1669 miles of old road and 33 bridges were repaired at a total cost of Rs. 65,544 as compared with 1,954 miles of old roads repaired at a total cost of Rs. 77,442 during the previous year.

73. The total expenditure incurred during the year on new buildings amounted to Rs. 1,473 in addition to which Rs. 28,031 were spent on repairs and improvements to existing buildings making the total expenditure on buildings Rs. 29,474 as compared with Rs. 82,195 during the last year.

74. The total amount of Rs. 11,105 was spent under this head for miscellaneous works such as upkeep of office compound, fencing and salaries of chaukidars. Nothing is worth special mention under this head.

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## CHAPTER VIII.

### EXPLOITATION AND COMMERCIAL DEVELOPMENT.

#### I. Major Produce.

75. There has been no change in the method and agency of working the forests during the year under report. All the important forests were as usual worked under either the uniform or selection systems of management and are sold to timber traders under five years leases. Since the abandonment of the departmental agency standing trees are being sold to the contractors in the forest to meet local demands as well those of Northern India and during the year there were only a few areas that were worked departmentally for the Srinagar reserve fuel supply.

76. All the fellings conducted during the year under report were regulated by the provisions of the sanctioned Working Plans and the prescriptions thereof were strictly adhered to, but owing to the depression of timber markets certain areas of thinning coupes and also those falling under improvement system were held in abeyance to check the fall in prices of timber.

77. The total quantity of timber extracted by departmental agency during the year excepting drift timber was 11,885 cft. representing .08 per cent of the total outturn of timber excluding timber given to concessionists and free grantees. The corresponding figures for the previous year were 447,372 cft. representing 1.7 per cent of the total timber outturn.

78. Departmental extraction was limited to clearing stocks from the Kashmir, Jhelum Valley and Sindh Divisions of the Kashmir Circle.

79. The total quantity of firewood extracted during the year by departmental agency excepting chhandah collections etc. was 11,99,969 cft. representing 58.5 per cent of the total outturn of firewood (excluding firewood removed by the

Extraction by  
departmental agency.  
(a) timber.

(b). Firewood.





Willow Planting in Ningle Swamp.



Photos. by S. S. Oswal.  
 Crop of Willow 12 years old.  
 Haran Plantation, Kashmir Valley.







concessionists and free-grantees and firewood from drift operations). The corresponding figures for the previous year were 24,76,306 cft. representing 71.99 per cent of the total firewood outturn.

80. As stated in the previous years report, the retail sale firewood depots which were existing in the town of Srinagar were closed down, there has been no trouble regarding the fuel supply to the public at all during the year under report, and the selling rates remained moderate. In order, however, to guard against any sudden rise of prices the department maintained an adequate reserve of firewood with which retail depots could be re-started in case of emergency.

81. During the year under report 40,042 cft. of unmarked drift timber and 17,485 cft. of firewood were collected on the Jhelum, Chenab and Ravi rivers. The revenue realized from the sales of drift timber was Rs. 39,247 as compared with Rs. 68,693 during the previous year. The decrease in revenue is largely due to the slump in the market prices.

82. Stocks of timber in sale depots decreased from 333,499 cft. at the beginning of the year to 236,587 cft. at the close while the corresponding figures for firewood were 579,708 cft. at the beginning of the year and 1,604,591 cft. at the close. The increase in firewood is due to building up of the reserves for Srinagar town supply as explained above.

83. Statement XIII shows the prices realized for different kinds of timber at the main departmental sale depots. As the quantity of departmental timber for sale in the market has decreased with the abandonment of departmental fellings, the average rates obtained on sale have been very low because the timber offered for sale was of somewhat inferior quality. The following will give a better idea of the rates obtained on sale of different kinds of timber at Jhelum Sale Depot :—



				Average rate per cft. ob- tained.		
				No.	Cft.	
						Rs. as. ps.
Deodar logs	...	3,124	74,401			0 8 4
Anandar logs	...	2,881	56,060			0 3 7
Partal logs	...	446	5,822			0 1 6
Chil logs	...	417	5,386			0 2 3
Deodar scantlings	...	527	1,754			0 9 1
Anandar "	...	85	292			0 9 1
Partal "	...	1,372	7,591			0 5 7
Chil "	...	16	48			0 4 9
Chappas	...	927	927			0 15 0
Khunds	...	230	57			0 1 5

84. As regards conditions of timber market in Srinagar, it is hardly favourable owing to the political unrest which has affected the trade in general causing reduction in prices of timber too.

85. The total quantity of timber extracted by purchasers was 15,062,068 cft. representing 79 per cent of the total outturn as compared with 26,214,920 cft. representing 94.7 per cent during the previous year. The decrease is due to the fact that owing to the fall in prices and to the decreased demand purchasers did not extract Fir.

86. The total quantity of firewood extracted by purchasers was 835,508 cft. or 41.09 per cent of the total firewood outturn as compared with 824,209 cft. or 24.65 per cent during the previous year. The increase is due to the de-control of firewood depots in Srinagar town which encouraged the royalty contractors to bring more firewood in Srinagar town for local sale by converting the material unfit for extraction as timber.



## II. MINOR FOREST PRODUCE.

87. No change was made during the year in the method or agency of working the minor forest products, the more valuable of which were collected under departmental agency and disposed of by the Utilization Division from Baramula godowns while un-important products were leased out by the territorial Divisions on lumpsum royalties. An exception to this is Artemisia which is sold under a fifteen years lease to Raja Sir Daya Kishen Kaul who does his own collection and pays royalty on the outturn.

88. The total quantity of kuth extracted by departmental agency amounted to 1247½ maunds. It was considerably below the normal outturn prescribed in the Working Plan. This is due to the depression of kuth market in China and the purchasers were therefore unable to take up all the available annual output. The total quantity of kuth received at the Baramula godown including previous years extractions was 2,664 maunds. The total quantity of kuth sold was 2,007 maunds out of which 2,000 maunds were sold to Messrs. E. D. Sassoon and Co. under their five years agreement and the balance of 7 maunds was sold to others under terms of the agreement of the Kuth contractors. The total revenue realized from sale of Kuth amounted to Rs. 5,75,961 as compared with Rs. 5,76,720 during the previous year.

89. Resin operations were continued in the Udhampur Division only during the year under report. The total quantity collected amounted to 25,239 maunds as compared with 26,984 maunds during the previous year. The curtailment of this production is due to the slump in the world's market. The total revenue from the sale of crude resin during the year amounted to Rs. 1,36,529 as compared with Rs. 1,38,278 of the previous year.

90. 54,120 bamboos extracted during the year were sold at Rs. 2,343 as compared with 60,076 bamboos sold during the previous year.



91. The demand for birch bark has practically ceased and its extraction has therefore been shut down in both Circles.

Birch bark.

92. The total revenue realized from the sale of minor forest products extracted under departmental agency amounted to Rs. 7,55,493 as compared with Rs. 7,78,669 during the previous year.

93. Like the previous years Artemisia was worked by Raja Sir Daya Kishen Kaul under the terms of his fifteen years lease. About 108 tons of dried leaves = 2,948 maunds 9 seers 14 chataks were collected by him from Gurez and Astore Ranges during the year of which the royalty recovered was £. 2707/11/5 or Rs. 35,852. The total realization including previous year's unrecovered balance amounted to Rs. 84,573/9/6.

Extraction by  
private agency.  
(a). Artemisia.

94. Leases of other minor forest products were sold as usual on royalty and the total amount realized from this source was Rs. 22,235 as compared with Rs. 20,356 during the previous year.

(b) Miscellaneous.

95. The total revenue realized from the sale of minor forest products extracted by private agency amounted to Rs. 113,299 as compared with Rs. 42,521 during the preceding year. The increase is chiefly due to the previous years outstanding on account of Artemisia being recovered and adjusted in accounts during the year under report.

(c) Revenue realized.

96. The following statement shows the revenue realized during the year from the more important minor products mentioned above as compared with the revenue obtained during the previous three years :-

Name of products	Year 1985-86	Year 1986-87	Year 1987-88	Year 1988-89
Kuth root ...	15,92,300	5,77,233	5,76,720	5,75,961
Artemisia ...	2,72,817	74,694	22,165	84,574
Crude Resin...	2,39,113	2,90,260	1,38,278	1,36,529



## III. OUTTURN OF FOREST PRODUCE.

97. The following statement shows the outturn of various classes of forest produce extracted during the year as compared with the figures of the preceding year :-

Class of produce.				1987-88.	1988-89.
Timber cft solid	...	...		27,866,310	19,374,890
Fuel	...	...		24,301,364	22,760,663
		Total	...	52,167,674	42,135,533
Bamboos valuing Rs.	...			3,060	2,468
Fodder grass leaves Rs.	...			2,261	2,053
Minor forest products including Resin and Artemisia	...			199,135	231,187
Kuth root in maunds	...			1,177	1,247

98. The following statement shows the quantity of timber supplied at concession rates :-

Year.	Circle.	Quantity cft.	Market value Rs.	Prices realized Rs.
1988-89	Jammu	10,29,849	76,779	6,500
	Kashmir	22,01,683	1,33,441	20,585
	Total	32,31,532	2,10,220	27,085
1987-88	Jammu	2,09,368	24,732	2,580
	Kashmir	5,97,246	50,691	9,356
	Total	8,06,614	75,423	11,936

99. In addition to the above 200 cft. of timber was sold from sale depot Jhelum to State servants under the 10 per cent concession rates valuing Rs. 60 for Rs. 54



as compared with 820 cft. of timber sold at 10 per cent concession rates during the preceding year.

100. The following statement shows the quantity and value of forest produce removed during the year free of charge by the local villagers. The figures of firewood are estimated on the number of houses. These figures do not include grass and minor forest produce which are also removed free of charge:-

Year	Circle	Timber		Firewood		Total value Rs.
		Cft.	Value Rs.	Cft.	Value Rs.	
1988-89	Jammu	481,406	57,909	13,211,180	206,529	264,438
	Kashmir	470,242	46,517	7,746,442	154,926	201,443
	Total	951,648	104,426	20,957,622	361,455	465,881
1987-88	Jammu	36,795	7,897	13,211,180	206,581	214,478
	Kashmir	242,042	28,551	7,746,442	154,926	183,477
	Total	278,837	36,448	20,957,622	361,507	397,955

Besides, 400 cft. of Deodar timber was issued from sale depot Jhelum free of charge valuing Rs. 743.

101. The total quantity of timber exported during the year under report from the State forests and the Poonch Jagir amounted to 107,58,407 cft., vide Statement No. XIV, as compared with 66,60,522 cft. during the previous year.



#### IV. COMMERCIAL DEVELOPMENT AND RESEARCH.

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102. Fifty green pohu billets were sent to Dehra Dun to find out the best method of seasoning them. The Forest Research Institute experimented on these billets for six months and the Forest Economist in his final report states that the effect of the water soaking is undoubtedly to reduce the amount of degrade due to surface cracking and also to shorten the period of drying. On the other hand this favourable influence is offset by the loss in toughness due to soaking. In Impact Bending the elastic limit in foot-pounds was found to be 25.9 for the unsoaked, and from 16.9 to 20.9 for the soaked specimens. The Forest Economist, therefore, recommends that air seasoning should be resorted to without removal of the bark and with the ends of the billets coated with rosin composite. He estimates six months time for proper seasoning when the final moisture contents will be from 10 to 12 %. Interesting comparisons have also been made between pohu timber on the one hand and hickory and foreign ash on the other, and they show that the strength of pohu, though in some instances intermediate between ash and hickory, has the tendency to approach the latter to which it is in some respects superior. The strength and elasticity of pohu fit it admirably for use as hammer handles. Acting on this advice about 13,000 fresh billets have been cut for air seasoning.

103. Besides tool handles, pohu is now being used in the boot and shoe industry. Sports and drum manufacturers at Sialkot are also trying to use it as substitute for hickory which is imported from America. Further experiments are going on and it is hoped that in the near future a big market will be established for this timber which up to this time was used as firewood only.

104. Further experiments and tests made at Ishapore have conclusively shown that there is no defect in the Kashmir walnut wood provided the timber is extracted from green standing trees. The defect lay with the steaming process which

Seasoning pohu for  
tool handles.

Walnut wood for  
rifle parts.



has now been discontinued. The half wroughts are sent from here without previous steaming and these on arrival at Ishapore are seasoned in Electric Kilns. The Superintendent of the Rifle Factory intimates that in future they will not indent half wroughts from anywhere else as far as possible, so that this market is more or less secured for future. A new order for the future supply of half-wroughts for full requirements of the Ordnance Department of the Government of India has been accepted. This will provide a full year's work, and a net revenue of about Rs. 35,000 per annum for the first three years and Rs. 70,000 per annum afterwards.

105. Horsechestnut timber has now been definitely established in the Punjab market for making cheap furniture and is much in demand. Timber from other broad leaved species. Other timbers, such as maple and birdcherry etc. are being tried as substitutes for foreign species such as *Acer pseudoplatanus*, and German walnut especially for the manufacture of photo frames and other small industries in Calcutta, Cawnpore and Lucknow.

106. (a) Digitalis. It has now been established beyond doubt—thanks to the research work done by Minor forest products. Col. Chopra and the publicity given to it by the Bengal Chemical Works—that Digitalis grown in Kashmir is far superior to that grown elsewhere not only in India but in Europe also. All the important Pharmaceutical works in India are getting their requirements from Kashmir although it costs them about Rs. 25 per maund more than the Digitalis imported from foreign countries. The present output is hardly sufficient to meet the demand of the Indian market and nothing can be spared for foreign countries.

(b). *Podophyllum Emodi*.

The *Podophyllum* root from Kashmir is capturing the world market for this drug as it is impossible for foreign countries to sell it at the rates at which the Kashmir product is being sold.

(c). *Belladonna*.

The sale of *Belladonna* root is also being extended in the foreign markets.



## CHAPTER IX.

### FINANCIAL RESULTS.

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107. On account of the general slump in trade the market conditions for timber were extremely depressed. The rates of sale of timber were the lowest obtained for several years, and the traders were unable to dispose of the whole of their stock even at these rates. Consequently the lease-holders of the Kashmir State forests were threatened with utter ruin as they could neither work the forests economically at the high rates entered in their agreements nor were they able to pay the royalty due to the State. It is hardly necessary to say that next to agriculture the forest is the biggest industry, and employs the largest number of men in Kashmir. The money in circulation in this trade comes indirectly to the Government treasury in several forms such as land revenue etc. The ruin of the lease-holders meant not only the disorganization of the timber trade in Northern India which would have taken several years to recuperate but would have also caused much unemployment and distress especially in those parts of the State where the local inhabitants rely very largely on forest works for their livelihood and payment of land revenue. To stop dumping of cheap timber on the market, His Highness the Maharaja Bahadur was pleased to sanction the following reduction in outturn.

- (i) Deodar. 25 % in the case of contracts with a collateral sleeper contract; 50 % in other contracts.
- (ii) Kail and Chir. 50 % in all contracts.
- (iii) Fir. Not to be extracted at all unless required by the contractors.

This reduction in outturn was calculated by the committee who recommended it, to be equivalent a reduction in revenue during 1988-89 of Rs. 5.05 lacs.



108. On further petitions made by the lease-holders, His Highness the Maharaja Bahadur graciously granted a handsome remission of royalty in cash up to the extent of Rs. 14.64 lacs. By this act of wise statesmanship, His Highness the Maharaja Bahadur has not only stabilized the timber market in Northern India but also has saved thousands of the inhabitants of the State from the ruin that threatened them. The immediate wholesome effect of the reduction in outturn and remission in royalty was that the rates obtained for the forests leased out this year were higher than those expected.

109. The effect of these remissions, on the forest revenue, was inevitable. The net surplus has fallen to Rs. 22,68,724 as compared with Rs. 49,81,584 of the preceding year.

110. The slump in the market of all kinds of produce has reduced the purchasing power on the part of the usual consumers and for this reason the rates obtained during the year under report for timber, Kuth root, crude resin, and other minor products having fallen caused an abnormal decrease in profits. Until there is a recovery in the existing world-wide slump in trade, no large increase in surplus can be expected.

111. The following statement compares the results of the year with those of 1987-88 :—

Year.	Receipts.	Expenditure;			Surplus.
		A.	B.	Total.	
1988-89	38,23,719 100	7,20,850 18.86	8,34,145 21.80	15,54,995 40.66	22,68,724 59.34
1987-88	68,83,055 100	8,60,151 12.50	10,41,320 15.13	19,01,471 27.63	49,81,584 72.37

112. The total value of stock in hand at end of Assuj 1989 declined from Rs. 8,43,564 to Rs. 5,33,105. The decrease is due to disposal of last year's stock of Kuth and other drugs.



113. Outstandings on account of revenue at the end of the year were Rs. 22,60,144 as compared with Rs. 25,82,316 at end of the last year. As explained in previous reports these are not true outstandings, the large sums shown as outstandings, being due to the fact that the full sale price of the trees sold under standing tree leases is entered in the accounts of Baisakh, but only one instalment of the purchase price is actually due from purchasers, under their agreements during the financial year, the remaining falling due in the second half of the Sambat year which falls in the succeeding financial year.

114. Advances outstanding against contractors and disbursers at end of Assoj 1989 amounted to Rs. 58,747 as compared with Rs. 1,20,141 at the end of Assuj 1988.

115. During the year under report Sindh heads the list of the revenue producing Divisions with a surplus of Rs. 4,49,653 and the Keran and Langet Divisions were second with over 3 lacs each. The two Chenab Valley Divisions, Kishtwar and Ramban gave a combined surplus of about 5 lacs. Muzaffarabad gave over  $2\frac{1}{2}$  lacs, Bhadarwah 2 lacs, while each of Kamraj, Jhelum Valley and Utilization Divisions gave over one lac, and Udhampur Rs. 74,440 whereas the rest forest Divisions Mirpur, Riasi, Billawar, Kashmir and Pir Panjal worked at a loss as is shown in Statement XX.

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† Statement No. XVIII.

†† Statement No. XIX.



## CHAPTER X.

### MISCELLANEOUS.

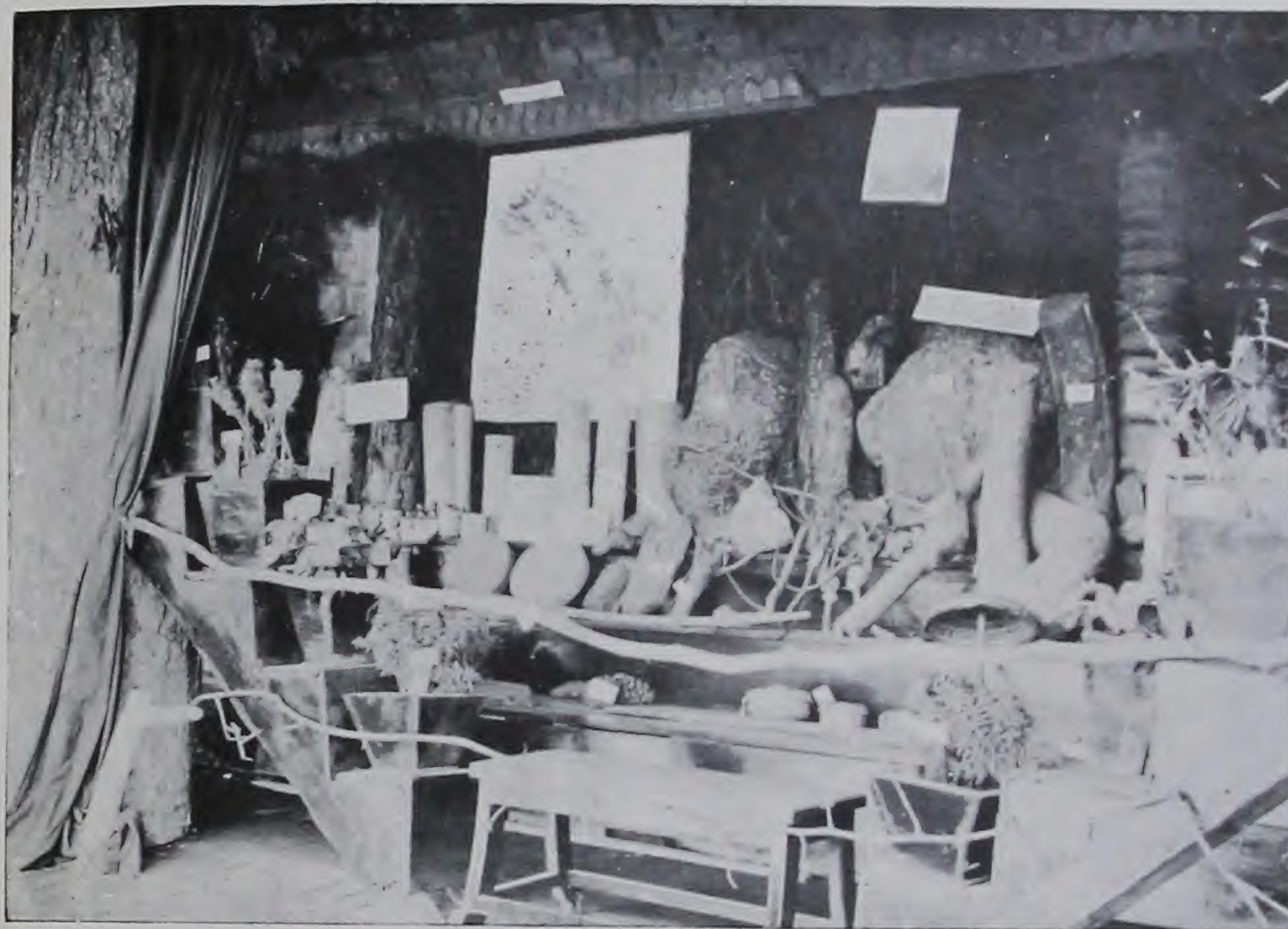
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116. The Third State Exhibition was held in the month of September on the occasion of His Highness the Maharaja Bahadur's birthday. As usual, a very fine collection of forestry exhibits demonstrating all branches of the Department's activities was displayed in the Forest Section. Working models showing various stages of the manufacture of scantlings such as measurement of trees, sawing etc. were very much appreciated by the public.

117. Political disturbances, which assumed serious turn in the Mirpur District, resulted in a considerable loss to Government property and dislocation of contractors' work at various places. The executive staff of the Department which is generally posted at out of the way places worked under difficulties but there was no other casualty than the murder of a Forest Guard at the hands of the rebels.

118. During the year, the Gilgit Forest Rules were sanctioned by His Highness the Maharaja Bahadur. These rules empowered the Wazir-i-Wazarat of the District to control the sale of timber and firewood through a Forest Ranger. Amendment to the Gulmarg Forest Rules were also sanctioned. Under the recommendations of the Glancy Commission, the Timber Distribution Rules were sanctioned by His Highness the Maharaja Bahadur. These rules directed a superior officer in each Forest Division personally to distribute trees to zamindars in each Zail, to their full requirements. Wide publicity was given to the concessions enjoyed by zamindars under the Jammu and Kashmir Forest Notices, and other rules, by distributing a printed pamphlet in vernacular which embodied an epitome of all the concessions. Rules and regulations of the Department have been greatly altered, since the first publication of the Forest Manual, and there was a great need of a book which contained these in their amended form. During the year, the Forest Law Manual, containing all the rules and regulations as





The Forest Infirmary  
Showing the diseases of trees



Copyright

Photos. by H. L. Wright.

The Forest Stall  
Jammu and Kashmir State Exhibition, 1989.







they now stand, was published and distributed.

119. The zealous way in which all ranks of the service, with very few exceptions, is deserving of record.

Staff.

120. Mr. Wright has drawn special attention to the excellent work of Lala Tek Chand Hoon, Conservator of Forests, Kashmir circle. He also mentions Thakur Haqiqat Singh Jamwal and Bhai Sher Singh, Deputy Conservators, for specially good work. Lala Kewal Kishen Nanda, Deputy Conservator, must be mentioned for his interest in improving resin tapping work and reducing the cost. Lala Jai Kishen Nanda is commended for making special arrangements for supply of timber to the villagers and Qasbas under most trying conditions.

121. Mr. Shadi Lal Vadehra, Deputy Conservator of Forests in charge of the Working Plans Branch of the Direction Office, has done brilliant work and has brought the whole Working Plan work including the checking and writing up of Control forms up-to-date.

122. Thakur Harnam Singh, Deputy Conservator in charge of the important Research Division carried out his duties very efficiently.

123. Among Rangers L. Tej Bhan is mentioned for good scientific work with reference to the regeneration of the Zaura forests of the Pir Panjal Division while Pandit Mulk Raj deserves special mention for kuth protection work.

124. Relations with other Departments were generally cordial and the Chief Conservator is grateful to the Heads of other departments who rarely failed to co-operate when their assistance was necessary. The thanks of the Department are also due to the various Ministers in whose portfolio the Department was placed from time to time and especially to Mr. V. N. Mehta, the present Revenue Minister, for the keen interest taken by them in its welfare.

Conclusion.

Dated Srinagar the  
24th April, 1933.

P. H. CLUTTERBUCK,  
CHIEF CONSERVATOR OF FORESTS,  
HIS HIGHNESS' GOVERNMENT,  
JAMMU & KASHMIR.







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## APPENDICES.

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## STATEMENT No: XIII (Paragraphs 83)

*Prices realized during 1988-89.*

Species.	Class.	A. LOGS.			
		1987-88.		1988-89.	
		Volume sold.	Price per cft.	Volume sold.	Price per cft.

## KASHMIR CIRCLE.

KAMRAJ DIVISION.			Rs. as.p.			Rs. as.p.	
Deodar logs	...	II	...	...	2801	0	3 5
Fir logs	...	II	19	0 1 6	...	...	...
Deodar, Kairu & Budlu logs	...	}	...	...	165980	0	2 7
JHELUM VALLEY.							
Fir logs	...	...	...	...	686	0	1 7
Budlu logs	...	...	...	...	4479	0	0 6
Kairu logs	...	...	...	...	72	0	0 8

## JAMMU CIRCLE.

JHELUM DIVISION.							
Deodar logs	...	II A }	384296	0 14 9	3776	1	0 8
"	...	B }	..	...	14062	0	13 4
"	...	III	165131	0 7 5	56563	0	6 4
Anandar logs	...	II A }	97714	0 7 5	973	0	9 3
"	...	B }	...	...	11920	0	5 5
"	...	III	...	...	43167	0	2 10
Partal logs	...	II B	...	...	2932	0	1 3
do. & Banasri logs	...	}	...	...	2890	0	1 8
Chil	...		...	...	2484	0	2 4
"	...	III	...	...	2902	0	2 0

For scantlings see the annexed page.



STATEMENT No.

Prices realized

Species.	Size.	B.	
		1987—	
		No. sold.	Volume sold.

KASHMIR

KAMRAJ DIVISION.

Deodar & Kairu scantlings	...	...	...	...
Deodar scantlings	...	...	..	...

JHELUM VALLEY.

Budlu Beams	...	...	...	...
-------------	-----	-----	-----	-----

JAMMU

JHELUM DIVISION.

Deodar Beams	...	...	330 No.	2310
Deodar sleepers	...	10'	35051No.	122678
Deodar & other scantlings	...	...	...	...
Anander Beams	...	...	...	...
" sleepers	...	...	...	...
" other scantlings	...	...	...	...
Partal Beams	...	...	10722	75054
" sleepers	...	...	8474	29659
" other scantlings	...	...	...	...
Chil Beams	...	...	3	21
" sleepers	...	...	...	...
Other scantlings	...	...	...	...



## XIII (Continued)

during 1988—89.

## SCANTLINGS.

1988		1988—1989			
Price per piece.	Price per cft.	No: sold	Volume sold cft.	Price per piece	Price per cft.

## CIRCLE.

Rs. as. p.	Rs. as. p.			Rs. as. p.	Rs. as. p.
...	...	...	54199	...	0 6 9
...	...	...	77	...	0 2 7
...	...	1101 No:	...	0 1 11 per	scantling

## CIRCLE.

8 4 6	1 3 0	14	...	6 6 7	...
4 1 2	1 1 9	313	...	6 1 4	...
...	...	200	...	1 3 1	...
...	...	12	...	3 14 11	...
...	...	40	...	1 10 9	...
...	...	33	...	1 8 8	...
3 14 0	0 7 8	1121	...	1 11 0	...
1 6 7	0 6 5	75	...	0 13 6	...
...	...	176	...	0 10 2	...
4 5 4	0 9 10	1	...	7 0 0	...
...	...	4	...	1 4 3	...
...	...	11	...	0 4 8	...



## STATEMENT XVII

*Summary of Revenue and Expenditure for the year 1988-89.*

Budget Heads.	Amount		
	Rs.	A.	P.
<b>REVENUE.</b>			
1. Timber and other produce removed from the forest by State Agency :-			
(a) Timber ... ..	170005	0	0
(b) Firewood and Charcoal ... ..	121894	0	0
(c) Bamboos ... ..	2343	0	0
(d) Kuth roots ... ..	569892	0	0
(e) Grass and other minor produce ... ..	183258	0	0
Total ... ..	1047392	0	0
II Timber and other produce removed from the forest by contractors or purchasers:-			
(a) Timber ... ..	2483051	0	0
(b) Firewood and Charcoal .. ..	41129	0	0
(c) Bamboos ... ..	125	0	0
(d) Grazing and fodder grass ... ..	2034	0	0
(e) Other minor produce ... ..	111140	0	0
Total ... ..	2637479	0	0
III. Confiscated drift and waif wood ... ..	39247	0	0
Total ... ..	39247	0	0
IV. Revenue from forests not managed by the State	.....		
(a) Duty on Foreign Timber and other forest produce ... ..	.....		
(b) Revenue from shared and private forests ... ..	.....		
Total ... ..	.....		



## STATEMENT XVII (Continued).

Summary of Revenue and Expenditure for the year 1988-89.

Budget Heads.	Amount		
	Rs.	A.	P.
<b>REVENUE—Contd.</b>			
V. Miscellaneous:—			
(a) Fines and forfeitures ... ..	10535	0	0
(b) Refunds ... ..	17518	0	0
(c) Other sources ... ..	71548	0	0
Total ... ..	91767	0	0
Total Revenue ... ..	3823719	0	0
<b>EXPENDITURE.</b>			
<i>A.—Conservancy and Works.</i>			
I. Timber and other produce removed from the forests by State Agency :-			
(a) Timber ... ..	140230	0	0
(b) Firewood and Charcoal... ..	169353	0	0
(c) Bamboos ... ..	.....		
(d) Kuth roots ... ..	78516	0	0
(e) Grass and other minor produce ... ..	87995	0	0
Total ... ..	476094	0	0
II. Timber and other produce removed from the Forests by consumers or purchasers:-	7348	0	0
III. Confiscated drift and waif wood ... ..	1311	0	0
IV. Revenue from Forests not managed by the State ... ..	.....		
(a) Duty on Foreign Timber and other forest produce ... ..	.....		



STATEMENT XVII ( *Continued* ).*Summary of Revenue and Expenditure for the year 1988-89.*

Budget Heads.			Amount		
			Rs.	A.	P.
<b>EXPENDITURE ( <i>Contd.</i> )</b>					
(b)	Revenue from shared and private forests	... ..	.....		
	Total	...	.....		
V.	Rent of leased forests and payments to share-holders in forests managed by the State	... ..	550	0	0
VI.	Live Stock, Store, Tools and Plant-				
(a)	Purchase of cattle	... ..	.....		
(b)	Feed and keep of cattle	...	120	0	0
(c)	Stores, Tools and Plant	...	7339	0	0
	Total	...	7459	0	0
VII.	Communications and Buildings-				
(a)	Roads and Bridges	... ..	76449	0	0
(b)	Buildings	... ..	29504	0	0
(c)	Other works	... ..	16834	0	0
	Total	...	122787	0	0
VIII.	Demarcation, Improvement and Extension of Forests-				
(a)	Demarcation	... ..	3664	0	0
(b)	Cost of Settlement, compensation for land and rights	... ..	662	0	0
(c)	Surveys	... ..	16	0	0
(d)	Working plans	... ..	21204	0	0



## STATEMENT XVII (Continued).

Summary of Revenue and Expenditure for the year 1988-89.

Budget Heads.			Amount.		
			Rs.	A.	P.
EXPENDITURE (Contd.)					
(e)	Sowing and planting	... ..	26409	0	0
(f)	Protection from fire	... ..	928	0	0
(g)	Other works	... ..	27336	0	0
	Total	...	80219	0	0
IX. Miscellaneous—					
(a)	Refunds	... ..	10459	0	0
(b)	Law charges	... ..	947	0	0
(c)	Other works	... ..	11941	0	0
	Total	...	23347	0	0
	Total A. Conservancy and Works	...	720850	0	0
B.—ESTABLISHMENT.					
I. Salary —					
(a)	Conservator	... ..	62233	0	0
(b)	Superior officers	... ..	145963	0	0
(c)	Subordinate Forest and Depot Establishment	... ..	345280	0	0
(d)	Other Establishment	... ..	137470	0	0
(e)	Deputation and Special allowance...	...	24119	0	0
(f)	Famine allowance	... ..	.....		
	Total	...	715065	0	0



STATEMENT XVII (*Continued*).*Summary of Revenue and Expenditure for the year 1988-89.*

Budget Heads.			Amount.		
			Rs.	A.	P.
<b>B.-ESTABLISHMENT (<i>Contd.</i>)</b>					
<b>II. Travelling allowance-</b>					
(a)	Conservator	...	4976	0	0
(b)	Superior officers	...	17145	0	0
(c)	Subordinate Forest and Depot Establishment	...	39292	0	0
(d)	Office Establishment	...	12945	0	0
	Total	...	74358	0	0
<b>III. Contingencies-</b>					
(a)	Stationery	...	3032	0	0
(b)	Carriage of tents and records	...	13558	0	0
(c)	Rents, rates and taxes	...	3743	0	0
(d)	Official postage	...	11053	0	0
(e)	Sundries	...	13336	0	0
	Total	...	44722	0	0
	Total B. Establishment	...	834145	0	0
	Add total "A" Canservancy	...	720850	0	0
	Grand total Expenditure	...	1554995	0	0







## STATEMENT

Financial results of

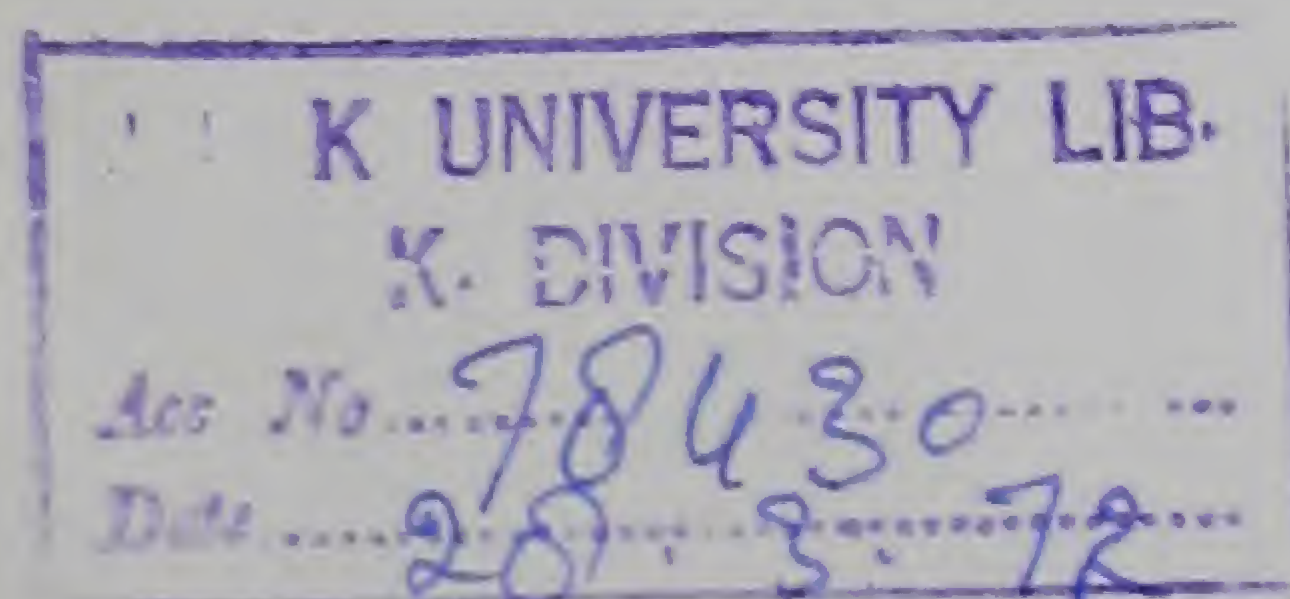
Division.	Timber and other produce removed from the Forests by State Agency.		Other Revenue.	
	Receipts.	Charge.	Receipts.	Charge.
Direction Division ...			1927	720
Research " "			5	
Mirpur Division (Jammu Circle)	14127	93	23777	423
Riasi " " ...	92	77	16516	202
Billawar " " ...	2350	1771	12717	426
Udhampur " " ...	137609	69313	71332	1160
Ramban " " ...	2294	1483	312673	617
Kishtwar " " ...	68183	17164	247544	450
Bhadarwah " " ...	...	22	252220	291
Jhelum " " ...	...	4944	47900	5746
Jammu W. P. " " ...	...	...	15	...
Bhadawah W. P. " " ...	...	...	2	...
Circle office Jammu Circle ...	...	...	229	1661
Circle office Kashmir Circle	3	68	46	1339
Kashmir Division " " ...	27849	61088	48281	837
Sindh " " ...	434873	57023	148257	20105
Muzaffarabad " " ...	1362	1834	326061	18895
Keran Division " " ...	92	36465	439692	29616
Kamraj Division " " ...	74379	64936	231595	8428
Langet Division " " ...	28645	1915	364215	5291
Jhelum Valley Division " " ...	5096	32431	185278	5971
PirPanjal Division " " ...	39259	76400	44845	9974
Utilization Division " " ...	210680	56703	1699	...
Total ...	1046893	483730	2776826	112152



XX.

the year 1988—89.

Formation protection and improvement of Forest.	"B" Establish- ment.	Total.		Difference.	
Charges.	Charges.	Receipts.	Charges.	Surplus.	Deficit.
11138	72204	1927	84062	...	82135
1819	12216	5	14035	...	14030
9894	41501	37904	51911	...	14007
3019	35585	16608	38883	...	22275
4215	30571	15067	36983	...	21916
9153	54875	208941	134501	74440	...
8692	49863	314967	60655	254312	...
10913	42867	315727	71394	244333	...
8166	34176	252220	42655	209565	...
...	43539	47900	54229	...	6329
3802	9941	15	13743	...	13728
1917	9455	2	11372	...	11370
...	26013	229	27674	...	27445
...	26874	49	28281	...	28232
5667	47757	76130	115349	...	39219
10911	45438	583130	133477	449653	...
1830	45367	327425	67926	25949	...
407	37744	439784	104232	335552	...
6542	42324	305974	122230	183744	...
9704	41503	392860	58413	434447	...
6204	35200	190374	79806	110568	...
8587	33740	84104	128701	...	44597
2388	15392	212379	74483	187896	...
124968	834145	3823719	1554995	2268724	325283











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